MEMORANDUM

TO: Paul Foster, P.E.

FROM: Ravi Rangan, P.E.

Bruce Steltzer

SUBJECT: The Premcor Refining Group, Inc.
Renewal and Significant Permit Modification to **Permit: AQM-003/00016 - Part 3**

DATE: November 14, 2007

Background:

The Premcor Refining Group, Inc. owns and operates a petroleum refinery (NAICS 32411) located in Delaware City, Delaware. The refinery has the potential to emit greater than 25 tons per year NO_x and VOCs, greater than 100 tons per year SO_2, greater than 100 tons per year CO, and greater than 25 tons per year hazardous air pollutants (HAPS) listed in Section 112(b) of the CAAA of 1990. Therefore, the refinery is subject to Regulation No. 30 of the State of Delaware's Regulations Governing the Control of Air Pollution.

The Delaware City Refinery (DCR) located in Delaware City was owned by Star Enterprises at the time the Title V application was submitted to the Department. On July 1, 1998, Shell Oil Company, Saudi Refining, Inc., and Texaco Inc. formed Motiva Enterprises LLC, combining the major elements of Shell's and Star's eastern and southern refining and marketing businesses. The ownership of Star Enterprise was transferred to Motiva Enterprises LLC in October 1998. On May 1, 2004, the DCR was purchased by The Premcor Refining Group, Inc., (Premcor). The inherent complexity of this facility coupled with the fact that the majority of process units are major sources themselves, has necessitated this permit to be structured in several parts. The Air Quality Management (AQM) Section of the Department of Natural Resources and Environmental Control issued Parts 1(Permit AQM-003/00016- Part 1) and 3 (Permit AQM-003/00016-Part 3) of this Title V permit on November 14, 2001 and April 11, 2005 respectively. The emissions units covered by the Title V Part 3 permit includes the Delaware City Power Plant (DCPP) which is comprised of 3 Riley Stoker boilers,1 Foster Wheeler boiler, 2 Texaco gasification trains, an acid gas removal system, a cooling tower, a flare and 2 GE combustion turbines.

On May 3, 2005, Premcor filed an appeal before the Environmental Appeals Board of certain provisions in Part 3 of this Title V permit. While AQM and Premcor have worked cooperatively to resolve the appealed sections of this Title V Part 3 permit, it is important to note that ongoing projects have resulted in changes to the Regulation 2 permits for the emission units covered under this Title V part 3 permit. Because several appealed provisions were subsequently resolved by being incorporated in these Regulation 2 permitting actions, AQM found it meaningful to reconcile the comments made in the appeal in concert with its regulatory and technical analysis of the Regulation 2 driven changes.

Regulation 2 Driven Changes[1]:

As a brief introduction, it is noteworthy to recap that the original permitting exercise for the Repowering Project (RP) included all of the above equipment with the exception of Boiler 4. In accordance with the construction permits issued for the Repowering Project, Boiler 2 was to have ceased operation at the end of the start up year, i.e., by December 31, 2001. Since the initial start up in 2000, the availability of the RP was severely limited, and as a result it was unable to provide the steam and power that it was designed to generate. In 2001, Motiva, therefore, reassessed its steam and power generating capability and sought to

[1] See Memorandum from Ravi Rangan and Bruce Steltzer addressed to Paul Foster dated July 19, 2006 (Document Number F:\EngandCompliance\CRR\06011CRR).

keep Boiler 2 operational after the RP start up year. The Department issued an Administrative Penalty Assessment and Secretary's Order (No. 2001-A-0053) dated December 31, 2001, granting permission for the continued operation of Boiler 2, subject to its being modified so as to meet a nitrogen oxides (NO_x) emission limitation of 0.04 lb/mmBtu on a 24 hour rolling average by June 25, 2004.

As part of its regulatory and technical review, AQM conducted a comprehensive analysis of the steam and power balance of the RP and evaluated the RP's PTEs in a scenario that depicted DCPP operations after the modification of Boiler 2 is completed[2]. AQM's review concluded that the Boiler 2 modification project could translate into a win-win situation for all affected parties if more of the future DCPP steam generation could be realized from the upgraded and less polluting Boiler 2 rather than from the older Boilers 1 and 3. As a mechanism to make this requirement practically enforceable, AQM incorporated Condition 2.3 of **Permit: APC-90/0289-CONSTRUCTION (Amendment 5)(RACT)-Boiler 2** to read as follows:

> *Motiva shall submit complete permit applications at least six months prior to the completion of the modification of Boiler No. 2 that proposes unit specific rolling twelve month emission limits for the CCUs and Boilers 1, 2 and 3 based on the revised capacity factors. These applications shall reflect the increased utilization of Boiler No. 2 and the consequent reductions in the emissions of NO_x and other pollutants from these affected units.*

Summarizing, this Regulation 2 permitting action established new and reduced PTEs based on revised capacity factors that account for the increased utilization of Boiler 2 as provided for in Condition 2.3 of **Permit: APC-90/0289-CONSTRUCTION (Amendment 5)(RACT)-Boiler 2**. The above changes resulted in new applicable requirements that incorporate the revised and reduced PTEs that are reflected in Premcor's application dated April 21, 2005. Upon completion of its review, AQM issued amended operation permits: **Permit: APC-90/0288-OPERATION (Amendment 5)(RACT) – Boiler 1; Permit: APC-90/0289-OPERATION (Amendment 6)(RACT) – Boiler 2; Permit: APC-90/0290-OPERATION (Amendment 5)(RACT) – Boiler 3**; and **Permit: APC-97/0503-OPERATION (Amendment 3)(LAER)(NSPS) – Combined Cycle Units** for the Delaware City Power Plant Boilers and Repowering Project with practically enforceable limitations that include all applicable requirements. These applicable requirements constitute a significant permit modification to **Permit: AQM-003/00016-Part 3**. Premcor has submitted an application for a significant permit modification pursuant to the State of Delaware "**Regulations Governing the Control of Air Pollution**" Regulation No. 30 Section 7(e)(3) on October 12, 2007.

Based on the data and certifications contained in the application, AQM concludes that the applicant meets all applicable requirements promulgated by the Environmental Protection Agency (EPA) and the Department of Natural Resources and Environmental Control (DNREC). Rather than modify the permit, DNREC believes it appropriate and efficient to issue a renewal of this permit so that its expiration date will coincide with the expiration dates for **Permits: AQM-003/00016 – Part 1 (Renewal 1) and AQM-003/00016 – Part 2**. This will allow DNREC to combine the three parts into a single document at the next renewal period. This process will be in accordance with the requirements of Section 7(j) of the State of Regulation No. 30 of Delaware's Regulations Governing the Control of Air Pollution. Therefore a "draft" permit renewal and modification has been prepared.

Recommendation:

In an effort to optimally utilize limited resources, this memorandum serves as a vehicle to reconcile comments made during the appeal and simultaneously incorporate the most current applicable requirements

[2] See Memorandum from Ravi Rangan addressed to Robert R. Thompson dated August 13, 2002 (Document Number F:\EngandCompliance\CRR\02088CRR). The modifications to Boiler 2 were completed on June 24, 2004.

in the attached draft Title V Part 3 permit. The public participation requirements of Section 7(j) of the State of Regulation No. 30 of Delaware's Regulations Governing the Control of Air Pollution will be followed.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
14		Premcor has commented that it appeals the issuance of the permit because the permit and terms and conditions contained therein are arbitrary, capricious, unreasonable, constitute an abuse of the Secretary's discretion, are contrary to fact, are not supported by substantial evidence, are not in accordance with applicable law, are procedurally deficient, and are otherwise contrary to or outside the Secretary's authority under the provisions of the Delaware Environmental Control Statute, 7 Del. C. Chapter 60, and the Regulations Governing the control of Air Pollution for, including but not limited to the following reasons:	AQM and Premcor have worked cooperatively to resolve the majority of the appealed sections of this Title V Part 3 permit. This permitting exercise also includes a permit revision for significant permit modification whereby changes from ongoing projects (as described in the introduction) have been incorporated in this Title V part 3 permit.
15	Condition 1.a.	Table 2 purports to identify and list the emission points and units that are subject to this Permit. The chart also contains "source descriptions" as part of the identification. It is unclear whether DNREC considers these "source descriptions" as enforceable Permit conditions. To the extent that Table 2 is intended or could be construed to constitute enforceable Permit conditions, such conditions are not required by applicable law nor constitute precise descriptions of the sources. For these reasons, Table 2 is vague, ambiguous, arbitrary, capricious and not required or supported by applicable law.	AQM clarifies that the purpose of Table 2 of the permit is to provide concise descriptions of all the emission units covered by the Title V permit and to identify their respective emission points. AQM expects these descriptions provided by the Company in the permit applications to accurately represent the emission units and emission points. If there are discrepancies, to the extent such discrepancies result in increases in emissions beyond the permitted levels AQM would consider them to be enforceable permit conditions.
16	Condition 1.b.	Condition 1.b purports to identify the underlying construction and operating permits for the emission units covered by this permit. The intended effect of this listing is unclear. To the extent that the Department intends to incorporate some or all of the listed permits by reference, such incorporation is inconsistent with the goals of the Title V program. Specifically, the Title V permit is intended to identify and set forth all requirements applicable to the source in a comprehensive permit, not through reference to other permits. There is no statutory or regulatory basis for DNREC to include such a list	AQM clarifies that the purpose of Condition 1.b is to provide a chart that identifies the underlying permits whose provisions have been incorporated into this Title V permit. It also specifies the reference number that will be used to identify the source of the underlying permit condition throughout this Title V permit. Both

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		as a Permit condition. Furthermore, Condition 1.b contains a footnote referencing earlier versions of certain boiler permits "that have not been superseded by the Permit." Again, since the Title V permit is intended to constitute a comprehensive listing of applicable requirements for the facility, all prior permits should be superseded by the Permit. Accordingly, the intended legal relationships between these footnoted permits, the permits listed in the body of Condition 1.b and the remainder of the proposed permit is unclear and unlawful. Thus, Condition 1.b is vague, confusing, inappropriate, fails to provide Premcor with specific notice of its compliance obligations, and is not required or supported by applicable law.	these clarifications have been made and will be incorporated as a footnote in the draft Title V Part 3 permit.
17	Condition 2	Condition 2 sets forth the "General Requirements" for the Permit. A large number of these General Requirements are neither "applicable requirements", as that term is defined by Regulation No. 30, nor are they conditions required by Section 6 of Regulation 30. As such, these conditions are unnecessary and not required or supported by applicable law. These unnecessary conditions include: 2.b.3; 2.b.5; 2.b.6; 2.b.9; 2.c and 2.c.1; 2.e.1 through 2.e.8; 2.i.1 through 2.i.4; 2.l.2; 2.m.1; and 2.m.6. Regulation 30 also contains a number of provisions that impose certain obligations on a permittee under certain conditions without requiring that these obligations be included as permit conditions. Despite the fact that a number of these obligations are not necessarily applicable to current operations at the DCR, DNREC has restated these regulatory provisions and included them as additional compliance conditions. The Permit cannot, and should not attempt to, identify hypothetical future conditions and impose permit restrictions should such conditions be realized. Premcor has no ability to certify actual compliance with these conditions that impose obligations under hypothetical future conduct. Accordingly, these conditions are vague, unnecessary and not required or supported by applicable law. These conditions include: 2.d; 2.f.1 through 2.f.3; and 2.n.	Paragraphs 17 through 27 of the appeal document refer to various boiler plate provisions in the Title V permit. AQM notes the boiler plate conditions in the model Title V permit were developed with stakeholder participation over a decade ago. The purpose having these boiler plate conditions in the model Title V permit was to incorporate those applicable regulatory requirements that are common to all facilities and to prescribe them in the model permit as requirements that are enforceable as a practical matter thereby ensuring they will protective of Delaware's environment. It should be noted that the vast majority of affected Title V facilities have not objected to these boiler plate conditions. Indeed, Motiva Enterprises, LLC the immediate predecessor of Premcor did not object to the same boiler plate
18	Condition 2.a.	Condition 2.a requires that each document submitted to the Department/EPA "pursuant to this permit" be certified by a	

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		responsible official as to truth, accuracy, and completeness. The Permit, however, does not otherwise define the types of documents that are submitted "pursuant to" this Permit, and thereby subject to Condition 2.a. Therefore, Condition 2.a could apply to an extremely wide range of correspondence or other documents exchanged between Premcor and DNREC or USEPA. Accordingly, Condition 2.a is vague, overbroad, potentially unduly burdensome and not required or supported by applicable law.	conditions in Part 1 of this Title V permit. For that matter, Star Enterprises, which was the corporate entity owning the refinery prior to Motiva Enterprises, was invited to participate in the development of the model permit but chose not to do so and did not submit any adverse comments at that time. Now Premcor has used the appeal process as a vehicle to submit a plethora of adverse comments on these very same boiler plate conditions. While some of Premcor's comments on the boiler plate conditions contained in Condition 2 of the Title V permit seem to be meaningful, many of the comments pertain to changes to the boiler plat conditions. AQM does not believe the appeal process is the appropriate vehicle to address Premcor's comments on the boiler plate conditions in Condition 2 because these boiler plate conditions affect all major sources. Therefore, AQM intends reconvening a new stakeholder review process to reassess these boilerplate conditions in the near future. Based on the outcome of the stakeholder review process, AQM will develop a new set of boilerplate conditions in the model Title V permit. In the meantime, AQM
19	Condition 2 .b.7	Condition 2.b.7 of the proposed permit generally requires compliance with the AAQS in accordance with the State of Delaware "Regulations Governing the Control of Air Pollution." Condition 2.b.7 is overly broad, ambiguous and inappropriate because any and all emission limits applicable to sources covered by the proposed permit should derive from source specific requirements and be specified within the proposed permit. The purpose of the Title V permit is to provide the Department and the permittee with a clear comprehensive statement of the compliance obligations applicable to the facility. Inclusion of a general reference to ambient air quality standards contained in the Regulations Governing the Control of Air Pollution is vague, confusing and fails to provide Premcor with specific notice of its compliance obligation.	
20	Condition 2.b.9	Condition 2.b.9 states that nothing in the proposed Permit shall be interpreted to preclude the use of credible evidence to demonstrate non-compliance with any terms of the proposed permit. Condition 2.b.9 does not constitute a specific compliance obligation of Premcor. Rather, it is simply a statement of the Department's legal position with respect to evidence that may be used in future enforcement actions under this proposed Permit. The legal positions of the Department cannot and should not be included as individual permit conditions. For these reasons Condition 2.b.9 is inappropriate for inclusion as a condition of the Permit.	
21	Condition 2.i.4	Condition 2(i)(4) states that Premcor shall allow authorized officials of the Department to sample or monitor, at reasonable times, any substance or parameter for the purposes of assuring compliance with	

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		this proposed Permit or any applicable requirement. The regulatory authority for this condition, however, limits the Department's ability to perform such sampling or monitoring to sampling or monitoring events that are otherwise "[a]uthorized by the Clean Air Act." Accordingly, Condition 2.i.4 as written is inappropriate, unlawful, overbroad and beyond the scope of DNREC's authority.	recommends no changes to Condition 2.
22	Condition 2.m.2	Condition 2.m.2 states "when required, the company shall submit to the Department a request for an administrative permit amendment" in accordance with applicable regulations. The condition attempts to address a hypothetical future condition, rather than any currently applicable regulatory standards based upon existing operations. The Permit cannot, and therefore should not attempt, to address hypothetical future conditions that may occur at the refinery. Instead, such conditions are adequately addressed by applicable regulatory standards that would become operative if the relevant factual conditions are realized. Accordingly, Condition 2.m.2 is inappropriate, unduly stringent, and not required or supported by applicable law.	
23	Condition 2.m.3	Condition 2.m.3 states "when required, the company shall submit to the Department a request for a minor permit modification" in accordance with applicable regulations. The condition attempts to address a hypothetical future condition, rather than any currently applicable regulatory standards based upon existing operations. The Permit cannot, and therefore should not attempt, to address hypothetical future conditions that may occur at the refinery. Instead, such conditions are adequately addressed by applicable regulatory standards that would become operative if the relevant factual conditions are realized. Accordingly, Condition 2.m.3 is inappropriate, unduly stringent, and not required or supported by applicable law.	
24	Conditions 2.m.3.i and 2.m.3.ii	Condition 2.m.3.i states that if Premcor seeks a minor permit modification it need not comply with the existing terms and conditions of the permit that is seeks to modify "at its own risk." There is no statutory or regulatory authority for the Department's	

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		position in Condition 2.m.3.i that Premcor can comply with its proposed permit modifications "at is own risk." Rather, the applicable regulations, which are correctly incorporated in Condition 2.m.3.ii, state only that if Premcor fails to comply with its proposed permit terms and conditions before the Department takes action on its minor permit modification application then the existing terms and conditions of the Title V Permit may be enforced against Premcor. Condition 2.m.3.ii by contrast, does not impose any applicable requirement upon Premcor, but rather reflects the Department's position regarding its enforcement authority under a certain hypothetical condition. Accordingly, Conditions 2.m.3.i and 2.m.3.ii are inappropriate, unduly stringent and are not required or supported by applicable law.	
25	Conditions 2.m.4	Condition 2.m.4 states "when required, the company shall submit to the Department a request for a significant permit modification" in accordance with applicable regulations. The condition attempts to address a hypothetical future condition, rather than any currently applicable regulatory standards based upon existing operations. The Permit cannot, and therefore should not attempt, to address hypothetical future conditions that may occur at the refinery. Instead, such conditions are adequately addressed by applicable regulatory standards that would become operative if the relevant factual conditions are realized. Accordingly, Condition 2.m.4 is inappropriate, unduly stringent, and not required or supported by applicable law.	
26	Condition 2.p	Condition 2.p imposes upon Premcor an obligation to submit a Risk Management Plan ("RMP") to the Environmental Protection Agency or to DNREC under certain circumstances. Premcor, however, has already submitted an RMP, and this Condition 2.p is not applicable. In addition, the applicable regulations specifically state that these RMPs are not themselves incorporated as Permit terms. This Permit fails to reflect this specific regulatory exclusion of the RMP as a permit term. Accordingly, Condition 2.p is vague, ambiguous and not supported by applicable law.	

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
27	Condition 2.q.1	Condition 2.q.1 contains conditions concerning compliance with federal regulations related to Protection of Stratospheric Ozone. Premcor, however, does not engage in the manufacture, import, or export of ozone-depleting substances. Accordingly, certain obligations listed under Condition 2.q.1 are inapplicable, unnecessary and not required or supported by applicable law or the record.	
28	Condition 3.b	Condition 3.b states that Premcor shall maintain "at a minimum" certain information required under condition 3.b.1 and 3.b.2 of the proposed Permit. By including the words "at a minimum", Condition 3.b fails to specifically and exhaustively delineate the recordkeeping requirement. Thus, Condition 3.b fails to provide Premcor with specific guidance as to whether additional information must be kept or if so, what type of information must be kept. Accordingly, Condition 3.b is vague, overbroad and does not supply Premcor with sufficient notice of its compliance obligations.	AQM concurs. AQM notes the words "at a minimum" have been deleted from other recently issued Regulation 2 permits. Therefore, AQM will make the request change to the draft Title V Part 3 permit.
29	Condition 3.b.1.i	Condition 3.b.1.i repeats the compliance obligation contained in Condition 3.a, requiring Premcor to comply with the standards detailed in Condition 3 – Table 1 of the proposed Permit. Accordingly, Condition 3.b.1 is redundant, unnecessary and potentially inconsistent with other Permit conditions.	AQM concurs.
30	Condition 3.c.2.i and Condition 3 Table 1	These conditions require Premcor to submit semi-annual compliance and deviation reports. A number of the reporting requirements in Condition 3, Table 1, however, require quarterly reporting of emission and related data. Requiring two sets of emission and related data, one semi-annual and the other quarterly, is unnecessary, unduly burdensome, arbitrary and capricious. Furthermore, many of the routine reporting requirements specified in the underlying construction permits require Premcor to submit to DNREC large amounts of raw, unqualified data. Given the standard reporting requirements for Title V permits plus the fact that Premcor is required to maintain this raw data on-site, makes any requirement to submit such data to DNREC unnecessary, unduly burdensome, arbitrary and capricious.	AQM concurs with Premcor that some of the conditions require submittal of large amounts of raw data. For example, there is a requirement for Premcor to submit daily CEMS calibration data for the boilers and the CCUs. This requirement was a carryover from the Regulation 2 permits which were developed when the Repowering Project was in its infancy and an as yet unproven technology. AQM notes that the recently amended Regulation 2

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
			operation permits issued in July 2006 no longer require submission of this kind of data. Although AQM disagrees with Premcor's assertion that the quarterly reports are unnecessary, unduly burdensome, arbitrary and capricious, AQM is cognizant of the progress made by the RP over the last decade. Having reviewed operating data spanning a period of 8 years, AQM is now satisfied that it has developed practically enforceable emissions limits, operational limits and work practice standards that will ensure compliance. Therefore, AQM will make these agreed upon changes to the draft Title V Part 3 permit and believes the semi-annual reports submitted pursuant to Condition 3.b will satisfy the quarterly reporting requirements required elsewhere in the permit.
31	Condition 3.c.2.i.B	Condition 3.c.2.ii.B.2 imposes upon Premcor certain reporting obligations in instances where there are emissions in excess of any permit condition "or emissions which create a condition of air pollution." The provision, as written, provides no clear guidance on what may be considered a "condition of air pollution." Specifically, to the extent emissions that are in compliance with permit conditions or other applicable DNREC requirements may be considered conditions of "air pollution" this condition is inconsistent with other conditions within the Permit. Accordingly, Condition 3.c.2.ii.B is inappropriate, overbroad, unduly stringent and not required or supported by applicable law.	Section 6002 of 7. Del. C and Regulation 1 of the State of Delaware's Regulations Governing the Control of Air Pollution defines "air pollution" to mean the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life or to property or which unreasonably

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
32	Condition 3.c.2.i.B.2	Condition 3.c.2.ii.B.2 requires Premcor to report emissions in excess of any permit condition or emissions which create a condition of air pollution immediately upon discovery to DNREC's 24 hour complaint hotline. The requirements of this condition are inconsistent and more stringent than the reporting practices required by DNREC in specific written guidance to the refinery, inconsistent with the objectives of the relevant regulation and therefore unduly burdensome.	interferes with the enjoyment of life and property within the jurisdiction of the State, excluding all aspects of employer-employee relationships as to health and safety hazards. Furthermore, all emission limits and emission rates prescribed by AQM in various permits must be shown under Section 11.6 of Regulation 1102 of the State of Delaware's Regulations Governing the Control of Air Pollution as not interfering with the attainment and maintenance of any National and State ambient air quality standard, and not endangering the health, safety, and welfare of the people of the State of Delaware. Therefore, AQM will not delete this requirement. With regard to Condition 3.c.2.ii.B.2, AQM notes that it has amended the reporting requirement in other refinery permits by differentiating between reporting requirements for emissions that pose an imminent and substantial danger to public health, safety or the environment versus the reporting requirements for more routine excess emissions. For the former, AQM still requires immediate reporting upon discovery to the complaint number by contacting the person who answers the phone. For the latter option, AQM

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
			will accept facsimile (fax) reports as an alternative to contacting the person who answers the phone.
33	3.c.3.i.E	Condition 3.c.3.i.E purports to grant DNREC the authority to require Premcor to submit in the future "other facts as the Department may require to determine the compliant status of the source." This condition neither imposes a specific requirement upon the refinery nor identifies requirements based upon any existing operating conditions. Instead, the condition relates to hypothetical scenarios and discusses only DNREC's interpretation of its authority. Accordingly, condition 3.c.3.i.E is inappropriate, overbroad, outside the scope of DNREC's authority and not required or supported by applicable law.	This is a boiler plate condition similar to those in Condition 2. Therefore, AQM will address this comment as part of its upcoming new stakeholder review process to reassess boilerplate conditions. Based on the outcome of the stakeholder review process, AQM will develop a new set of boilerplate conditions in the model Title V permit. In the meantime, AQM recommends no changes to Condition 3.c.3.i.E.
34	Condition 3, Table 1	Condition 3, Table 1 purports to represent a concise consolidated reference containing the specific applicable emission limitation/standards, operational limitation/standards, compliance methodologies, and reporting/compliance certification requirements for the sources covered by the proposed permit. However, the conditions set forth in Table 1 are duplicative, redundant and confusing. Instead of reviewing, consolidating and simplifying the obligations found in the applicable underlying individual permits, Table 1 in many instances simply restates, verbatim, the individual permit conditions. Copying permit conditions in this manner creates redundant and confusing compliance obligations. In addition, many provisions in table 1 contain an explicit reference to underlying construction permits. These references to prior permits are neither required by applicable law nor consistent with the purpose of the Title V permit program. Further, it is unclear what, if any, purpose these references serve and how these references relate to the list of permit references in Condition 1.b. To the extent that the Department intends to incorporate some or all of the listed conditions by reference, such incorporation is inconsistent with the goals of the	The Department believes Premcor should clarify this comment.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		Title V program. Accordingly, all of Table 1 is vague, confusing, inappropriate, fails to provide Premcor with sufficient notice of its compliance obligations and not supported by applicable law.	
35	Condition 3, Table 1, Reporting Requirements	Many of the reporting requirements identified in Table 1 require Premcor to submit quarterly "excess emission" reports to the Department. First, the obligation to submit quarterly reports is redundant of and potentially inconsistent with Premcor's independent obligation to submit semi-annual deviation reports under the Title V program. Requiring submittal of two sets of similar emissions and related data, one semi-annual and the other quarterly, is unnecessary, unduly burdensome, arbitrary and capricious. Second, much of the information requested in these "excess emission" reports does not relate to "excess emissions," but rather operating data, regardless as to whether the data reflects some emission exceedance. Accordingly, the provisions requiring quarterly excess emission reports are unduly burdensome and not required or supported by applicable law.	See AQM's response to Premcor's similar comment in Paragraph 30.
36	Condition 3, Table 1, Recordkeeping Provisions	A number of recordkeeping provisions listed in Table 1 require Premcor to maintain certain compliance records for five years. The requirement to retain such records is already contained in Condition 3.b. Accordingly, these provisions in Table 1 are unnecessary, redundant, confusing and potentially inconsistent with other proposed permit requirements.	While AQM concurs that Condition 3.b prescribes retention of records for 5 years, it disagrees with Premcor that the recordkeeping provisions in Table 1 are confusing or potentially inconsistent with other permit requirements. To the extent the recordkeeping requirements in Table 1 mirror those in Condition 3.b, AQM finds it acceptable to reference the Condition 3.b requirements in Table 1. In cases where the recordkeeping requirements do not mirror those in Condition 3.b, such as the records required by the NO_x Budget Program, which may be extended beyond 5 years, AQM has retained such

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
			provisions in the draft Title V part 3 permit.
37	Condition 3, Table 1, Date References	A number of provisions listed in Table 1 identify emission limitations, operational limitations, compliance monitoring obligations and reporting obligations beginning (or ending) on a specific date that had already passed at the time this permit was issued. To the extent any section of the table references a date that has passed, the section is confusing, vague and ambiguous, unnecessary and potentially conflicting with other permit conditions.	AQM has corrected the dates in question
38	Condition 3, Table 1.a.1.i	Section a.1.i on Table 1 is taken from a condition in a construction permit related to modification to Boiler 80-2 (APC 90/0289 (Amendment 5), Condition 2.1). This underlying condition merely allows the permittee to operate Boiler 80-2 "from the date of issuance of the referenced construction permit until the date Boiler 80-2 is shut down for construction of the modifications." Thus, this condition does not establish or identify any operational or emission limitations, compliance obligations or reporting obligations. Rather, the condition merely reiterates the authority to operate a source, which is otherwise reflected by the permit, and thus serves no purpose in this Title V permit. Accordingly, this condition is irrelevant, confusing and should be deleted.	AQM concurs.
39	Condition 3, table 1.a.2.i.E	This condition purports to require that the burner steam injection and the flue gas recirculation system be "working properly." First, the term "working properly" is vague and does not provide Premcor with sufficient notice of its compliance obligations. Second, the requirement that all air pollution control equipment at the refinery "work properly" is embodied in section e.1.i of Table 1. Accordingly, this condition is unnecessary, redundant, confusing and potentially inconsistent with other permit requirements.	AQM had developed this permit condition with the objective of ensuring operation of the pollution control equipment in a manner that is consistent with maintaining a NO_x emission rate of 0.04 lb/mmBtu on a 24 hour rolling average basis, the premise being that "proper operation" of the equipment is essential to achieve this performance. AQM concurs with Premcor that Condition e.1.i (under the facility wide requirements) requires operation in

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
			conformity with good air pollution control practices. While Condition e.1.i is a facility wide applicable requirement, it does not address the specificity of steam injection and flue gas recirculation as essential elements defining the proper operation of the pollution controls in this case. Therefore, AQM is amending this condition to read as follows: *Except during periods of start up and shutdown, the burner steam injection and flue gas recirculation systems in Boiler 2 shall be working in a manner consistent with maintaining 0.04 lb/mmBtu NO_x on a 24 hour rolling average basis.*
40	Condition 3, table 1.a.2.i.F and a.2.ii.E	This operational limit (a.2.i.F) sets a maximum temperature for the combustion air from the preheater for Boiler 80-2. The associated compliance method (a.2.ii.E) requires continuous temperature monitoring. To the extent that this operational limit constitutes a compliance demonstration method for Boiler 80-2 relative to any emission limit, the permittee has identified other, more appropriate methods to ensure and demonstrate compliance with applicable emission limits. Accordingly, this condition would be unnecessary and unduly restrictive, and the permit should not be used to perpetuate unnecessary conditions that unduly restrict Refinery operations. Thus, these conditions are unnecessary, redundant, and not required by applicable law.	A response to this comment is rendered moot because AQM has already deleted this requirement in the Regulation 2 operation permit. However, AQM disagrees with Premcor's assertion that a condition requiring continuous monitoring of the air preheat temperature is unduly restrictive and that it perpetuates an unnecessary condition that restricts refinery operations. Monitoring an operating parameter, such as the air preheat temperature of a boiler or thermal oxidizer is not unusual and is a generally accepted engineering practice to ensure proper operation of the pollution control equipment. AQM

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
			had incorporated this condition in the construction permit because the air preheat temperature had been identified by the technology licensor as a potential precursor to a NO_x exceedance. However, because AQM reviewed two years of operating data and satisfied itself that the air preheat temperature is not adversely affecting the performance of the pollution control equipment in this case, it deleted this requirement in the Regulation 2 operation permits issued on July 19, 2006.
41	Condition 3, Table 1.a.and Table 1.d	A number of the emission limits for Emission Unit 80 (the boilers) and Emission Unit 84 (the combined cycle units "CCUs") are combined across the two emission units. Rather than establishing one compliance methodology for these combined emission units, Table 1 repeats similar compliance standards that reference both the boilers and the CCUs in two separate places: the section of the Table concerning the Boilers and the section of the Table concerning the CCUs. The repetition of these compliance standards in multiple places within the Permit is redundant, confusing, and potentially ambiguous. Accordingly, these repeated, cross-referencing compliance obligations are vague, confusing, inappropriate, redundant, fail to provide Premcor with sufficient notice of its compliance obligation and not supported by applicable law.	AQM has issued amended Regulation 1102 operation permits in July 2006 where the combined emissions across two emissions units have been separated, where feasible. For example, each boiler and the combined cycle units have their specific mass emissions limit for each pollutant. On the other hand, to preserve the operational flexibility of the Repowering Project the combined emissions limits for the boilers and combined cycle units continue to be applicable requirements, which have been incorporated under Section f. of the draft Title V Part 3.
42	Condition 3, Table 1.a.2.i.C, b.2.i.and d.1.ii.E	These provisions repeat the identical operational limit for the sulfur content of the clean syngas that may be used to fuel various DCPP emission units. Rather than simply state the applicable operational limit for clean syngas, the Permit repeats this operational limit at	AQM has incorporated the syngas sulfur content in Section f of the permit which is applicable to multiple pollutants. However, AQM finds it

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		various times in the table. There is no justification for repeating the identical standard; to the extent that the Department would contend that a single exceedance of the syngas operational limit would give rise to multiple enforcement violations across the emission units, such portion would be contrary to applicable regulatory standards and due process considerations. Accordingly, these conditions are vague, redundant, potentially inconsistent and not supported by applicable law.	necessary to clarify Premcor's misconception that a single exceedance of a standard, such as the sulfur content of a fuel, cannot result in multiple violations. AQM clarifies that each emission unit subject to the standard will be considered to be in violation if an exceedance of the standard occurs.
43	Condition 3, Table 1.a.2.i.G	This condition purports to limit the sulfur content of fuel used by the Boilers within Emission Unit 80 in accordance with the provision of Reference Regulation 8. The limitations on the boiler fuel contained in conditions A and B of that same section of the Table, however, are more stringent than the general regulatory reference - a point conceded by the Department in their May 7, 2004 Review Memorandum. Accordingly, Condition 3 Table 1 a.2.i.G. is inconsistent with other permit conditions.	Regulation 8 of the State of Delaware's Regulations Governing the Control of Air Pollution prescribes a sulfur in fuel standard of 1 % by weight. AQM is aware that there are other more restrictive sulfur standards in the permit, such as the NSPS limitation of 162 ppm H_2S in refinery fuel gas which translates to approximately 0.02 % by weight. However, this Title V permit does not have a provision for streamlining, because Premcor's application had not identified the specific conditions which could be streamlined or the compliance methodology for the condition being streamlined. Therefore, both these standards are applicable requirements and each is independently enforceable.
44	Condition 3, Table 1.a.2.iii.D and E	These conditions reference stack testing requirements related to establishing stack test based emission factors for purposes of evaluating compliance with prescribed emission limits. The conditions do not impose any specific compliance obligation upon Premcor, but instead reference the Department's intent for the	The referenced stack testing requirements have been completed. Therefore, AQM will delete these conditions from the draft Title V Part 3 permit.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		creation of a compliance demonstration method in the future. Because the condition does not impose any compliance obligation upon the permittee, the condition is not appropriate for inclusion as a permit condition.	
45	Condition 3, Table 1.a.2.i.H	This condition includes the design capacity of Boiler 4 as an operational limitation. No such design capacity limit exists in the existing construction permit for Boiler 4, nor is required by or established under any applicable regulatory standard. Accordingly, this condition is unnecessary, inappropriate, arbitrary, capricious, and not supported by applicable law.	AQM disagrees with Premcor's contention that the heat input design capacity limitation for Boiler 4 is not required or established by any applicable regulatory standard. In accordance with Regulation 1102, Section 11.8 (c), AQM cannot establish any emission limit that is greater than the sources PTE. Because the antiquated Regulation 2 permit failed to specify appropriate mass emissions limits, AQM incorporated the design heat input capacity as shown in the permit application as a relevant operational limitation that will ensure the PTEs are not exceeded. However, in order to provide a measure of operational flexibility, AQM is willing to consider an alternative rolling averaging time of 365 days instead of the rolling 24 hour period in the Part 3 permit.
46	Condition 3, Table 1.a.2.v.G	This condition requires Premcor to notify DNREC before making any changes that cause the emission units to fall under the authority of Title IV of the Clean Air Act. This condition is not applicable to current operations at the DCR, but rather to hypothetical future conduct. In the event that changes at the Refinery would trigger Title IV applicability, Premcor would be subject to various requirements associated with that regulatory program. There is no regulatory basis for the imposition of an additional, preliminary notice requirement.	AQM reviewed the provisions of the Part 3 permit for applicability of the acid rain program provisions and found certain not currently applicable provisions in the application to have been transferred to the permit. AQM has revised the permit by deleting the not yet applicable provisions.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		Further, since this condition does not set forth a currently applicable requirement, Premcor is unable to certify compliance with the condition. Accordingly, this condition is vague, unnecessary and not required or supported by applicable law.	
47	Condition 3, Table 1.a.2.v.H	This condition requires Premcor to include in its semi-annual excess emission reports certain data concerning any low sulfur liquid fuel ("LSLF") combusted in Boilers 80-1, 80-2, 80-3 or 80-4. No applicable requirement requires Premcor to submit such information in an excess emissions report. Although the regulation referenced by the Permit condition allows the Department to establish additional periodic monitoring to confirm compliance with the applicable requirement where the applicable requirement does not require periodic testing, the LSLF data required by the condition would not provide data necessary to confirm compliance with any applicable requirement. For these reasons, the Condition is inappropriate, an abuse of the Department's discretion, and not required or supported by applicable law.	Burning LSLF in the boilers is a provision in the 2001 Consent Decree that can happen only in the event of curtailment in natural gas supply. In this eventuality, Premcor will have to submit an application to the Department seeking its approval prior to burning LSLF in any of the boilers. Therefore, AQM has deleted this requirement.
48	Condition 3, Table 1.a.2.vi	This condition requires Premcor to make certifications concerning the use of liquid fuel in combustion units in accordance with the terms of a Federal Consent Decree executed among Motiva, the United States of America and the State of Delaware, among other parties. There is no statutory or regulatory basis to restate and incorporate, and thereby enforce through the Permit, provisions of this Consent Decree. The Consent Decree is a complex document of limited duration reflecting a negotiated agreement among parties. The provisions of the Consent Decree cannot and should not be included as individual Permit conditions. For these reasons, this Condition is inappropriate, unduly stringent and beyond the scope of DNREC's authority.	AQM disagrees. Premcor continues to have the ability to burn refinery gas liquid condensate in Boilers 1 and 3. Therefore, AQM will not change this requirement.
49	Condition 3, Table 1.a.3.i.A-E	Condition E of these conditions prescribe PM_{10} and TSP emission limits for Boiler 80-2 "upon completion of the modification ... on June 25, 2004, whichever is earlier." Conditions A through D in that same section, however, prescribe separate limits for PM_{10} and TSP	AQM concurs.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		for Boiler 80-2. Given that the June 25, 2004 deadline has passed, the conditions as a whole are vague, confusing, ambiguous and fail to provide Premcor a clear and simple statement of its current compliance obligations with respect to PM_{10} and TSP emissions from Boiler 80-2.	
50	Condition 3, Table 1.d.1.ii.D, d.1.iii.D and d.1.iv.B	These conditions require Premcor to monitor H_2S content of syngas prior to combustion, purportedly in accordance with 40 CFR 60 subpart J. Subsequent to the issuance of the underlying construction permit containing this condition, the Federal Court of Appeals for the Third Circuit held, however, that Subpart J does not apply to the Power Plant and the CCUs. Accordingly, this condition is inappropriate and not required or supported by applicable law..	AQM concurs.
51	Condition 3, Table 1.e.3.iv	This condition requires visible opacity observations to be made facility-wide. The condition fails to expressly exclude from the visible observation requirement those emission units with a continuous opacity monitoring system (COMS). Furthermore, it does not exclude those times when the COMS is disabled or not operating properly due to temporary upset or normal maintenance procedures. Accordingly, this condition is overbroad, unduly burdensome, arbitrary and capricious.	AQM clarifies that the facility wide requirement for visible emissions evaluations does not apply to those emissions units equipped with COMs. This change has been made to the draft Title V Part 3 permit.
52	Condition 5	Condition 5 of the proposed Permit states that the Permit does not contain a compliance schedule. On February 11, 2004, however, Motiva submitted to DNREC a proposed compliance plan with a schedule for bringing Boilers 1, 2 and 3 into compliance with certain emission limits subsequent to the issuance of the Permit. Although DNREC has acknowledged that test runs have indicated non-compliance with emission limits in the proposed permits, DNREC has denied this request on the basis that any such non-compliance can be addressed through minor adjustments in operation and good engineering practices. To date, DNREC has provided no support for its position that the request through the Permit Application of a compliance schedule should not be satisfied. The failure to include a compliance schedule creates uncertainty for Premcor with respect to	The compliance issues in question have been resolved rendering this comment moot.

Paragraph No. in the Appeal	Permit Condition	Premcor Comments	AQM Response
		its compliance obligations and its ability to certify compliance with all applicable terms of the Permit. Accordingly, Condition 5 is arbitrary, capricious, not supported by evidence in the record and contrary to applicable law.	
53	Condition 6	Condition 6 states that the proposed Permit does not provide a permit shield, which is expressly provided for under Section 6(f) of Regulation 30. DNREC's purported basis for failing to include a permit shield in this proposed Permit is that the proposed Permit is one of three Title V operating permits that DNREC will issue to Premcor. The mere fact that the DCR Title V permit will be issued in three parts is not a justification to deny Premcor a permit shield in the proposed Permit. Furthermore, DNREC itself chose to divide DCR's Title V operating permit into three parts. DNREC should not deny Premcor permit shield protection based upon a purely ministerial process selected by DNREC. Accordingly, Condition 6 is not supported by the record and is contrary to applicable law.	AQM will provide a permit shield pursuant to the requirements in Section 6(f) of Regulation 30 of the State of Delaware's Regulations Governing the Control of Air Pollution.

Recommendations:

It is recommended the attached draft Title V operating Permit be issued pursuant to Section 7 of Regulation 30 of the State of Delaware's Regulations Governing the Control of Air Pollution.

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